



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month.



PUBLIC SERVICE EVENTS

Interested in helping? Visit <https://www.rars.org/public-service.php>

frequently for our 2019 ham public service schedule.

RARS General Meeting

Topic: What makes FT8 work?

By: Chuck Till, K4RGN

Date: August 13, 2019

Time: Meeting at 7:30PM

Informal gathering and refreshments from 7 - 7:30 p.m.

Where: Ridge Road Baptist Church. 2011 Ridge Rd., Raleigh

New HAM meeting, 6:00 p.m. before member meeting

Tadd Torborg, KA2DEW, New Ham Meeting Coordinator

[Click here for more information.](#)

Presidents Comments

By Carl Davis, W8WZ

On July 12, 1999 the United States officially ceased the use of radiotelegraphy. The operators at KPH in San Francisco walked away from the transmitters for the last time. When they left the building they left all of the gear turned on. Several years later that transmitter site became part of the National Parks Service and when staff from that organization entered the radio station they found all of the gear still on and the receivers that had been used to monitor the transmitted signal were receiving static. They then contacted some of the former employees of the station and talked about making it into a working museum of commercial radiotelegraphy and eventually, that effort was organized, a nonprofit organization formed and a new commercial license for the old transmitters was obtained, again with

[Continued on page 4](#)

RARS Officers

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The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the Saturday that is ten days before the general meeting. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

For Your Information

RARS General Meeting

Date: Second Tuesday of each month

Location: Ridge Road Baptist Church 2011
Ridge Road Raleigh, NC, 27607

Time: People begin arriving at 7 p.m. The
meeting officially begins at 7:30 p.m.

RARS Monthly Dinner

*See page 18 for a
different restaurant.*

RARS Repeaters in Raleigh

146.640 and 444.525

Join us for the nightly RARS net at 8 p.m.
on the 146.640 repeater. All hams holding a
Technician class license or higher are invited
to check in. We welcome both RARS and non-
RARS members to the net.

There is a net Listing on the RARS web-
site click here. <https://www.rars.org/nets.php>

VE Testing

The RARS VEs will accept walk-in testing in
February, May, August and November at
5:30PM, prior to RARS membership meetings
at Ridge Road Baptist Church; the RARSfest
in April; the Cary Swapfest in July; the JARS-
Fest in November; and following RARS license
classes. Please bring a photo ID, your origi-
nal and a copy of your current license, your
\$14 exam fee, and any valid CSCEs that prove
passing elements beyond that of your current
license. Visit <https://www.rars.org> for more in-
formation.

RARS Birthdays

Andy	AA9P	08/10
Hertz	KN4CUZ	08/10
Aaron	KN4ORB	08/14
Manny	K4KBM	08/14
Paul	AE4MN	08/15
Bernard	W4BRB	08/17
Mike	KM4BJV	08/18
David	W4EIP	08/18
Chuck	W3WZN	08/19
Bonnie	KK4OAK	08/19
Randy	KI4BRZ	08/20
Al	KE4IHX	08/20
Mike	KN4DRN	08/21
Ned	KV4MN	08/21
Barry	KD4WTI	08/22
Mirl	W4WMA	08/22
Chip	KE4NPS	08/23
Steve	KJ4BX	08/23
David	KJ4ZUO	08/23
Daniel	KW4TI	08/24
Peter	KJ4MDY	08/25
John	KG4AKV	08/25
Walter	KA2RGI	08/26
Mike	KG4GTP	08/27
Lizzy	KN4LGS	08/28
Jeff	NW4Z	08/29
Mike	KK4ETS	08/30
Sarah	KJ4WZD	08/31
Dan	KD4AGQ	08/31

New Members are listed on [page 5](#)

Presidents Comments continued

the call sign KPH. They also installed an Amateur Station in the same facility with the call sign of K6KPH. Volunteers put KPH and K6KPH on the air most Saturdays and the highlight of the year for these stations is a day known as the “Night of Nights” which takes place every July 12th to honor the end of commercial Morse in the United States.

To celebrate Night of Nights KPH transmits several messages on radiotelegraphy just like it did when it was in active service. The first message is sent at 3:00 PM Pacific Time on 426Kc, 500Kc, 4247Kc, 6477.5Kc and 8642Kc. After the opening message is sent, different operators take turns at the key sending a series of bulletins throughout the night. While that is happening, K6KPH is on the ham bands making 2-way contacts with Radio Amateurs on 3550Kc, 7050Kc, 14050Kc and 21050Kc.

K6KPH, while an amateur station, uses commercial operating practices. So, to call that station, you tune to their published frequency and call their station several times then stop transmitting, without sending your call sign at that time. If they hear you then they reply with “DE” and then you send your call sign. They then send a number and you again stand by. When they are ready to receive traffic they call the numbers they sent out, starting with 1. When the station who received 1 hears them send 1, then he calls them and they have their QSO. After that QSO is ended then another station can call, and be assigned a number and then stand by until his number is called and he can have his QSO. Many of the operators working K6KPH are former commercial operators who may not have a ham license. Obviously, there is a licensed ham serving as the control operator, but the operating practices the operator at the key is used to are those of a commercial circuit.

This year I copied the opening Night of Nights message on 8642KC. As the evening went on, I was able to also copy them on 6477.5Kc and 4247Kc but I was unable to copy them on either 426 or 500Kc. After spending some time listening to the bulletins from KPH I decided I wanted to work K6KPH as well, so I tuned to 40 meters at 8:30 PM but the band was still too short to work San Francisco from Raleigh. So, I waited and listened as 40 gradually got longer and I heard stations from farther and farther West as the sun set in the states West of us and 40 got longer. Finally, around 10 PM I heard K6KPH come in.

There were many stations calling him after each of his QSOs ended so it was a great opportunity to practice my infrequently used pileup busting skills.

In this day and age where we find DX on a spotting network online then simply enter their frequency on a direct entry keypad and hit send on the Keyer to make the contact, it was fun to do it with

Presidents Comments continued

the bug and hear the station on the other side also using a bug.

As in any pile up, I started by listening. I listened to the speed that the operator was sending and then I adjusted my bug to match his speed. Then I listened some more to see what patterns the operator had in answering his calls. Sometimes you find that a station always answers the first station in the pile up. Other operators most often answer the last station heard. Sometimes you notice that operators sending at a specific speed get answered faster than stations sending at other speeds. After listening for a while I discovered that the Op at K6KPH answered the person who was the last call sign in the pile up to be sent without any QRM on his signal. So, when I decided I was ready to call, I tried to place myself in that spot. Waiting until the pile up had all but stopped and just before K6KPH called someone, I would send my call at the same speed he was sending.

At 10:36 PM Eastern time, my strategy paid off and I made contact with K6KPH on 7050Kc. Some stations were sending their signal reports using a QSA system, but I used the RST system and sent 579. I received a report of 569, which I didn't think was bad considering they were running legal limit into really fancy antennas and I was running only 500 watts into an inverted Vee up about 60 feet. The QSO consisted of name, location and signal report and then I cleared off allowing Op Larry at K6KPH to get more stations in his log. And frankly, at 10:30 PM I was ready to get into bed and call it a night!

I hope everyone is enjoying the summer and spending some time with the ham radio hobby in a way that they find meaningful and fun!

73, Carl W8WZ

New RARS Members

Troy Mitchell	KN4WSO
Ken Brady Jr	KN4UWH
Julie Patterson	KG7LZZ
Collin Sullivan	Not Licensed
Phillip Jenkins	N4HF
Mike Tringali	KB1KOZ
Ken Galer	AC1BX

RARS July Membership Meeting



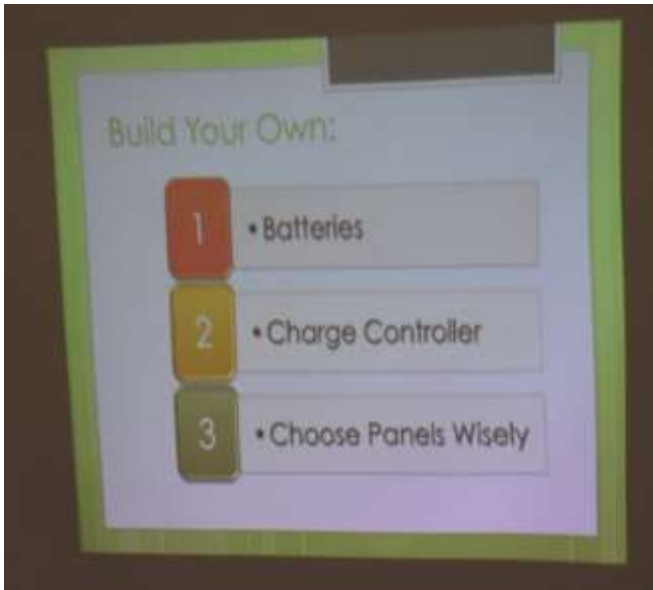
RARS members at the July 2019 Meeting

Presentation about Portable Solar Power



Ron Morin, KD4LOE
All about Batteries, Controllers
and Solar Panels.

RARS July Membership Meeting



Build your own



GOAL ZERO, Guardian 12V
Plus Charge Controller



Three 50 watt panels,
150 watts combined



Foldable panel for backpacking

RARS July Membership Meeting



Home made battery box with built in controller. 33Ah battery



[Goal Zero Yeti 400 Portable Power Station](#)

Portable power. 400Wh, 33Ah (12V) Battery capacity.

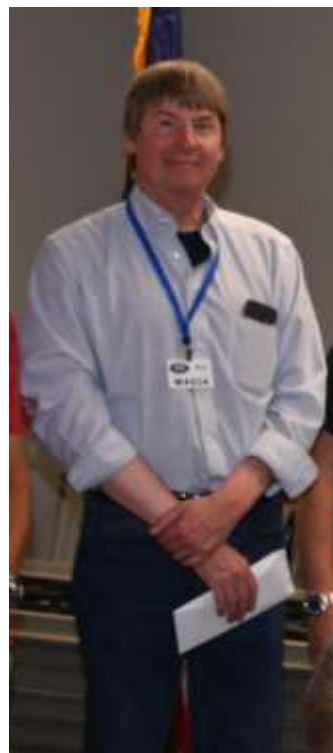
Chainable and replaceable sealed lead-acid AGM battery weighing 29 lbs.

Two USB ports, two AC outlets and 12V output.

RARS July Membership Meeting Tech Tip



Multi-function Tester -TC1



Bob Richards,
W4GIA

Bob Richards, W4GIA, one of our door prize winners, gave a Tech Tip during the meeting. He told the members about a component tester, TC1. To use it, you put a component in the ZIF socket and push the Start button. It will test transistors, capacitors, resistors and other components. It can be found on [Amazon](#), [banggood](#) and probably other websites.

I have a similar tester that I bought on eBay a couple of years ago. It does the same thing but it's not in a nice case. 73 Tom N4TL

July Membership Meeting, Door Prize winners



Left to right: Dave Daniels, W4EIP; Bob Richards, W4GIA; Mike Butler, K4MBX; Curt Phillips, W4CP; Andy McDaniel Jr, KN4JJU; Dick Gray, AA1DG; Ralph Church, KN4VIB

Future RARS Meeting Topics

Titles, topics, and speakers subject to change.

8/13/2019	What makes FT8 work?	Chuck Till, K4RGN
9/10/2019	Open Source Design Tools for Amateur Radio including Ki CAD	Dan Marks, KW4TI
10/8/2019	RARS Officers nominations RARS Auction	Election committee & Carl, W8WZ
11/12/2019	RARS Officers election and Show and Tell. Bring something of interest in Ham Radio that you would like to show off. Be prepared to talk about it. The time will be limited so everyone can have time to show their item.	Election committee & members
12/10/2019	RARS pot luck Holiday party. Sign up at the RARS website. RARS Officers induction.	Election committee

*New HAM meeting, 6:00 p.m. before the
member meeting*

Tadd Torborg, KA2DEW, New Ham meeting Coordinator

*The New Hams meeting is held every month before the regular RARS meeting.
We'll try to start by 6pm. We try to address topics in a manner that will be of help
to hams in their first year of operation.*



Tom, N4TL, talking about the Worked All States award

During the June New hams meeting Tom, N4TL, gave a presentation about the Worked All States award and the DXCC award. He also spoke a little about how to use the ARRL's Logbook of the world, LoTW.

WAS Award information at the ARRL. <http://www.arrl.org/was>

Become an Amateur Radio Operator



The Raleigh Amateur Radio Society is offering Technician Level

Amateur Radio Licensing Classes

at Sanderson High School - 5500 Dixon Dry, Raleigh, NC 27609

Class Schedule:

Week 1 - Wednesday, 2 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading: Chapters 1 & 2 of The ARRL Ham Radio License Manual

Week 2 - Wednesday, 9 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading: Chapters 3 & 4 of The ARRL Ham Radio License Manual

Week 3 - Wednesday, 16 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading: Chapters 5 & 6 of The ARRL Ham Radio License Manual

Week 4 - Wednesday, 23 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading Chapters 7 & 8 of The ARRL Ham Radio License Manual

Week 5 - Wednesday, 30 October 2019 7:00 PM to 9:00 PM

Pre-Class Reading Chapter 9 of The ARRL Ham Radio License Manual

Week 6 - Wednesday, 6 November 2019 7:00 PM to 9:00 PM

Test Day. Amateur Radio Licensing Tests Administered

Testing fee of \$14 due in cash or check at time of test. Students must bring photo ID, and have an FRN or Social Security Number and bring a black ink pen and #2 pencil. Students may bring a calculator that does not have a memory (or has the memory cleared by a test administrator). The use of smart phones or tablets as calculators is not allowed.

Capacity is limited to 20 students and registration is required. Due to limited seating no walk-ins will be accepted. Students must come with the textbook **ARRL Ham Radio License Manual, 4th edition**, ISBN: 978-1-62595-087-1 which can be purchased at this link: <http://www.arrl.org/ham-radio-license-manual>

To register for the class please visit: https://cs.wcpss.net/index.php?route=llcoursecontroller/course_detail&course_id=1714&cat=0

The non-refundable cost for the course is \$30 payable in cash or check made payable to RARS at the first session. For students over age 18 there is an additional fee of \$14 for the license test payable on the day of the exam.

To ask questions or register for the class please e-mail RARS Education Director Carl Davis at w8wz@aol.com



<https://www.rars.org>

Future Hamfests

A full list of Hamfests can be found at the
[ARRL website.](#)

08/10/2019 | 21st Annual Cape Fear Amateur Radio Society Swapfest

Location: Fayetteville, NC
Type: ARRL Hamfest
Sponsor: Cape Fear Amateur Radio Society
Website: <http://cfarsnc.org>

08/30/2019 | Shelby Hamfest

Location: Shelby, NC
Type: ARRL Hamfest
Sponsor: Shelby Amateur Radio Club
Website: <http://shelbyhamfest.org>

09/20/2019 | W4DXCC SEDCO

Location: Pigeon Forge, TN
Type: DX and Contest Convention
Sponsor: SEDCO
Website: <http://w4dxcc.com/>

10/12/2019 | W4NC Fall-Fest

Location: Winston-Salem, NC
Type: ARRL Hamfest
Sponsor: Forsyth Amateur Radio Club
Website: <http://W4NC.com>

11/17/2019 | JARSFEST

Location: Benson, NC
Type: ARRL Hamfest
Sponsor: Johnston Amateur Radio Association
Website: <http://jars.net>

Interesting websites

Are you looking for **programs that run on Apple products**? There are 56 pages of them on this website. <https://www.machamradio.com/>

Worked **Grids Mapping website** by WG7J. GridMapper v1.6.8 , requires an ADIF file that you generate with your logging software.

<http://wg7j.reinalda.net/gridmapper/gridmapper.php>

Another **mapping website** that works from entries an ADIF file.

<https://www.qrz.com/db/W9MDB>

Two **propagation prediction sites** from Charles Strickland, WA4OSS. Both of these sites gives the probability of being able to work from your home Grid to other parts of the world. After you enter the input information, it takes less than a minute to show the charts.

VOACAP HF Charts for RadCom

<http://www.voacap.com/radcom/>

Proppy HF Circuit Prediction: Radcom Predictions

<https://soundbytes.asia/propy/radcom>

Maritime Radio History Society. Thanks to Carl, W8WZ, for bringing this website to our attention. In cooperation with the Point Reyes National Seashore, part of the National Park Service, the Maritime Radio Historical Society (MRHS) has taken on the job of preserving the historic ex-RCA coast station KPH and returning it to the air. <http://www.radiomarine.org/>

[https://en.wikipedia.org/wiki/KPH_\(radio_station\)](https://en.wikipedia.org/wiki/KPH_(radio_station))

The Vintage News. **Electricity Battle Between Edison and Tesla** Comes to Life in a New Film.

<https://www.thevintagenews.com/2019/07/16/edison-tesla-film/>

How To Stop Thread Galling On Stainless Fasteners, "cold welding."

<http://www.estainlesssteel.com/gallingofstainless.html>

1963, **Acoustic memory calculator**

An astonishing old calculator – Numberphile on you tube, [Patent 3,546,676](https://www.youtube.com/watch?v=2Blx2x-Q2fE).

<https://www.youtube.com/watch?v=2Blx2x-Q2fE>

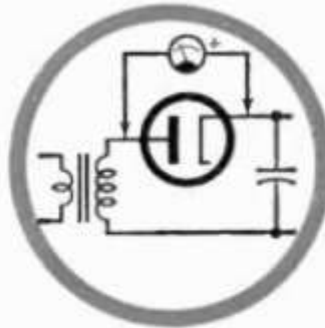
<https://www.rars.org>

THREE LETTER QUIZ

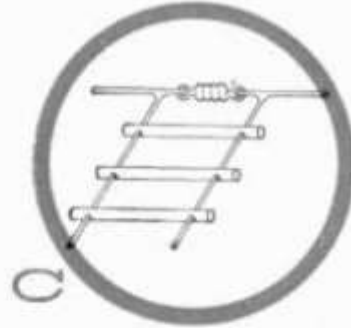
By ROBERT P. BALIN



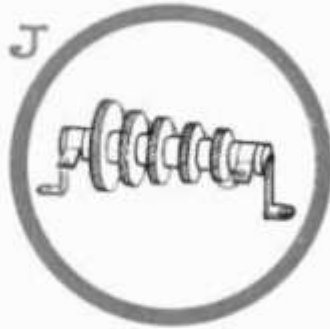
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B

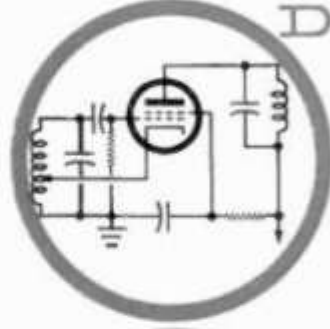


C

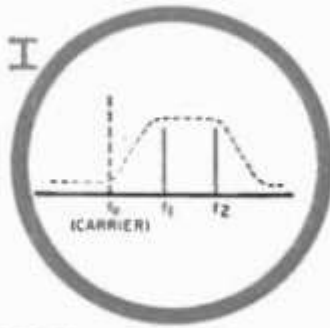


J

The special vocabulary of electronics includes many three-letter abbreviations that the technician and experimenter soon learn to recognize and interpret almost as readily as they do the language of the sports pages. Try your hand at matching up the numbered abbreviations below with the sketches that suggest the meaning of each one. Nine out of ten correct answers is a good score.



D



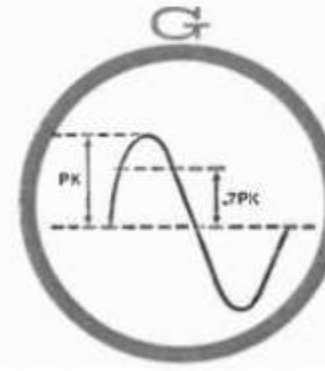
I



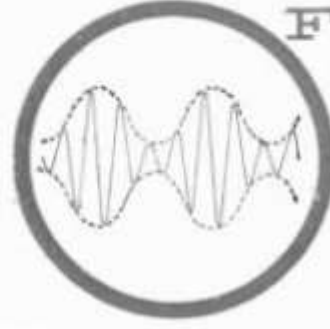
E



H



G



F

- | | | | | |
|-------------|-------------|-------------|-------------|--------------|
| 1 AWG _____ | 2 ECO _____ | 3 GMT _____ | 4 MCW _____ | 5 PIV _____ |
| 6 PPI _____ | 7 RFC _____ | 8 RMS _____ | 9 SSB _____ | 10 SWR _____ |

January, 1964

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Public Service

There are Public Service Events that you can help with each month.

Click on this link and you can see what ones are coming up.

www.rars.org/public-service.php

ARRL Public Service News.

<http://www.arrl.org/public-service>

Events you can signup for now:

2019 BikeFest

August 10, 2018 - Saturday - Hillsborough, NC

This event has 35, 62 and 100 mile routes and the proceeds benefit various local Bicycling-related charities. SAGS and Rest Stop Hams are needed.

* Location: 106 E. Margaret Lane, Hillsborough (near the Orange County Court House), NC 27278

* Ham Coordinator: John Stone (K3RHJ)

* Website: [BikeFest](#)

* TO VOLUNTEER, CLICK THE BUTTON BELOW

[Sign up for this event](#)

2019 Five-O Memorial Bike Ride

August 18, 2018 - Sunday - Raleigh, NC

This event has 32 and 62 mile courses and benefits the Raleigh Police Memorial Foundation. SAGS and Rest Stop Hams are needed.

* Location: Life Time Athletic of Raleigh, 8515 Falls of Neuse Rd., Raleigh, NC 27815

* Ham Coordinator: John Stone (K3RHJ)

* Website: [Five-O Memorial Ride](#)

* TO VOLUNTEER, CLICK THE BUTTON BELOW

[Sign up for this event](#)

TO VOLUNTEER, FILL OUT THE FORM AT www.rars.org/public-service.php

Continued from the previous page

2019 Bike MS: Historic New Bern Ride

September 7-8, 2019 - Saturday and Sunday - New Bern, NC

The event features 30, 50, 75 and 100 mile rides each day, requiring SAGS, staff Shadows and Rest Stop Hams. The event benefits the National Multiple Sclerosis (MS) Society and typically draws about 2000 riders.

This year's ride is especially important to support, as New Bern is rebuilding following the hurricane. If you're interested in helping, please sign up early.

- * Location: TBD, typically Union Point Park, 210 E Front St, New Bern, NC 28560
- * Ham Coordinator: Brian Young (KA9QJT) for Triangle-area Hams, collaborating w/Bruce (KS8L) of New Bern
- * Website: Bike MS New Bern Sign Up Genius page will be available later
- * Facebook (Optional): [Bike MS Ham Radio Support group](#)
- * Do consider making hotel arrangements now and expand your search to nearby cities.
- * TO VOLUNTEER, CLICK THE BUTTON BELOW

[Sign up for this event](#)

Everyone is welcome!



11:30 AM every Thursday a group of Hams get together for Lunch at Taco Bell. The address is 7036 E Hwy 64 Knightdale, 27545. 1.2 miles east of I540.

RARS Classifieds

Copied from <https://www.rars.org/classifieds.php>

The items below were listed within the last 30 days on the RARS website.

QUANSHENG 144/440 HT, MODEL UV-R50.... \$30

Posted July 25th, 2019 by: N4KYW, Howard Goodman

Contact: howagood@yahoo.com

Dual-band HT, a sort of knock-off of a Baofang, right down to the model number.

5 watts/1 watt switchable

128 channels (I've programmed about 18 channels for local repeaters, as well as several simplex frequencies)

Package includes (in no particular order):

Quansheng UV-R50 HT

Rubber ducky screw-on antenna

Earpiece

User's Manual

Charger cord

Charging stand

1600 mAh battery (installed and fully charged)

Optional programming cable and software CD

The all-important original cartons

RARS Monthly Dinner, Different Restaurant in September

All members and guests are welcome to the monthly (first Tuesday) RARS Supper, 6:30PM, at the IHOP Restaurant, 7471 Six Forks road, 27615.

Its on the corner of Six Forks road and Sawmill Road, 6:30 PM to 8PM They have a room for us that is to the left when you enter the restaurant.

Informal and Dutch, just bring your appetite and best rag to chew.

73, Chuck, K4HF

Minutes

Raleigh Amateur Radio Society

Members Meeting

Date | time 07/09/2019 @ 7:30pm | *Meeting called to order by* Carl Davis (W8WZ)

Membership Meeting

The monthly membership meeting of the Raleigh Amateur Radio Society met at the Ridge Road Baptist Church in Raleigh. The meeting was called to order by President Carl Davis (W8WZ), at 7:30 pm.

The pledge of Allegiance was recited

Approval of Minutes

A quorum was present; the June minutes were approved.

Continuing Announcements

The RARS dinner takes place monthly on the first Tuesday (next: July 6th) at 6:30p.m. at the Golden Corral; 6129 Glenwood Ave, Raleigh.

The next board meeting, which is open to all our members, will be Tuesday July 16th at 7pm in the church conference room.

Tonight's after-meeting gathering, for any who are interested, will be at the Rudinos at 3101 Edwards Mill Rd, Raleigh.

A new ham/Elmer's meeting with new hams, and anyone interested, takes place before each membership meeting at 6pm at the Ridge Road church and presented by Tadd (KA2DEW)

Minutes continued from the previous page

Before this meeting they had Tom give a presentation on “Worked All States”

On Thursday August 1st RARS will have a joint dinner with the Fox Hunt Group, in town for a convention, at the Cracker Barrel 955 Airport Blvd Morrisville NC at 7pm.

Door Prizes

There were 8 winners in our door prize drawing.

Dave Daniels (W4EIP), Bob Richards (W4GIA), Mike Butler (K4MBX), Curt Phillips (W4CP), Andy McDaniel Jr (KN4JJU), Dick Gray (AA1DG), Ralph Church (KN4VIB)

Congratulations to our July Winners; you can find their picture on our Facebook page and in the [Exciter](#).

Vice President Report/Exciter Chair-Tom N4TL

Tom reported that the August program is going to be “What makes FT8 work” by Chuck Till (K4RGN)

He also reminded the club that the auction will be in October.

Treasurer’s Report-Greg KE4PAX

Greg was not present; he did send Carl an update regarding membership renewal that stated the club had gone from 400 members down to 300 and the President reminded the club to renew their membership.

For those interested in official Treasurer report can contact Greg (KE4PAX)

Secretary’s Report-Tara W4TSW

Present but No Report

Board and Committee Reports

Education Director-Carl W8WZ Carl announced that the education team has scheduled their fall class with the wake county schools on Wednesday evenings with several RARS members volunteering to teach various segments. These classes will have a broader scope of advertising, thanks mainly to the school marketing outreach, along with online sign ups. To sign up just go to our rars.org website and clicked the link. He is also looking for an instructor to teach the rules and regulations sections.

Minutes continued from the previous page

Field Day Chair - Bob W4TTX Bob thanked the club, and all the volunteers, for a successful field day event this year. He stated we had pretty weather and delicious food and the event was a success, as always, he does not have the total score at this time but we were registered as an 8A station.

Board and Committee with No Report

Public Service - John K3RHJ

Food Service - Richard N1FUA

ARRL Liaison - Chuck K4HF

Youth Director - Murray K4MHM

Past President - Dennis NC4DK

ARRL Section Manager - Karl W4CHX

Webmaster - Hank K4HM

W4DW/W4RNC Trustee - Jeff AC4ZO

Director at Large - Alan AB4OZ

Director at Large - Joanne AA3N

Net Manager - Virginia NC4VA

FM Repeater Chair – Chuck W3WZN

Public Information Officer – Tara W4TSW

NCQSO Party Chair - Marty W4MY

RARSfest Chair-Tara W4TSW

Old Business

New Business

Minutes continued from the previous page

Additional Business/Comments/Announcements

Next Meeting

08/13/2019, 2011 Ridge Road at 7pm

Meeting was adjourned at 8:48 pm

Meeting Minutes taken and Submitted by Tara Goodwin W4TSW

Minutes

Raleigh Amateur Radio Society

Board Members Meeting

Will be published in a future issue of the exciter.



POPULAR ELECTRONICS

JANUARY
1964

35
CENTS

This three letter quiz was
copied from the January 1964
Popular Electronics magazine.

[The questions are on page
15.](#)

[https://www.americanradiohistory.com/
Archive-Poptronics/60s/64/Pop-1964-
01.pdf](https://www.americanradiohistory.com/Archive-Poptronics/60s/64/Pop-1964-01.pdf)

Three Letter Quiz

- 1-H The American Wire Gauge (AWG) system is used to measure wire diameter in the United States.
- 2-D In Electron Coupled Oscillator (ECO) circuit, the screen is the oscillator anode. Output is coupled to plate via electron stream only.
- 3-A Greenwich Mean Time (GMT) is time at Greenwich, Eng., meridian, given in 24-hour system.
- 4-F Modulated Continuous Wave (MCW) is a type of tone-modulated carrier wave transmitted by some commercial radiotelegraph stations.
- 5-B Peak Inverse Voltage (PIV) is maximum voltage across a rectifier in the reverse polarity.
- 6-E A PPI is a radar display, Plan Position Indicator type, showing scanned area as a map.
- 7-J A radio-frequency choke (RFC) is a coil having relatively high inductive impedance within its usable frequency range, without self-resonance.
- 8-G The root-mean-square (RMS) value of a sine-wave a.c. is the value that will cause the same heating effect in a resistive load as a numerically equal value of d.c.
- 9-I In single-sideband (SSB) transmission, the carrier and one sideband are suppressed, and only the remaining sideband is radiated.
- 10-C The standing wave ratio (SWR) on a transmission line is maximum value of current or voltage to minimum value, as measured along line.

January, 1964